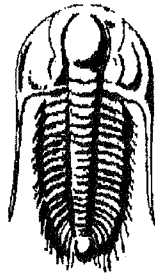


15-065-23597

21-7s-22w

IND



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Werth Exploration Trust**

1308 Schwaller Ave
Hays KS 67601-2242

ATTN: Andy Werth

21 7s 22w Graham KS

Worcester M-1

Start Date: 2009.11.30 @ 01:01:43

End Date: 2009.11.30 @ 09:46:08

Job Ticket #: 36732 DST #: 1

RECEIVED
JAN 27 2010

KCC WICHITA

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Werth Exploration Trust

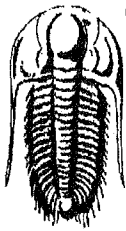
Worcester M-1

21 7s 22w Graham KS

DST # 1

Toronto-LKC-A-B

2009.11.30



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Werth Exploration Trust

Worcester M-1

1308 Schwaller Ave
Hays KS 67601-2242

21 7s 22w Graham KS

ATTN: Andy Werth

Job Ticket: 36732

DST#: 1

Test Start: 2009.11.30 @ 01:01:43

GENERAL INFORMATION:

Formation: **Toronto-LKC-A-B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:31:38

Time Test Ended: 09:46:08

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 42

Interval: **3455.00 ft (KB) To 3500.00 ft (KB) (TVD)**

Reference Elevations: 2245.00 ft (KB)

Total Depth: 3500.00 ft (KB) (TVD)

2240.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8365

Inside

Press@RunDepth: 805.06 psig @ 3464.01 ft (KB)

Capacity: 8000.00 psig

Start Date: 2009.11.30

End Date: 2009.11.30

Last Callb.: 2009.11.30

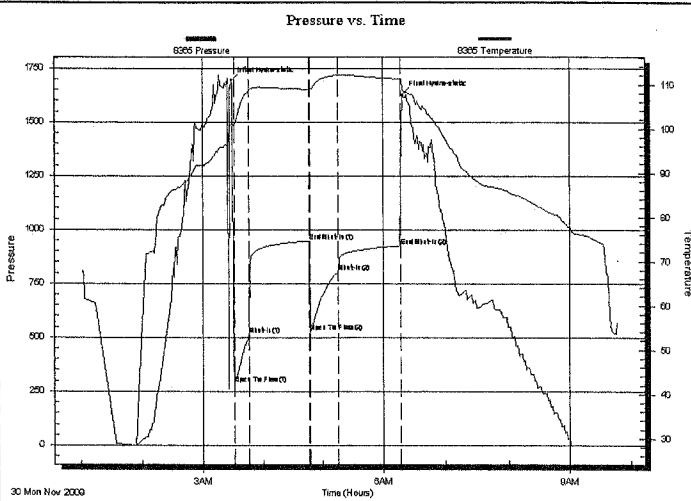
Start Time: 01:01:43

End Time: 09:46:08

Time On Btm: 2009.11.30 @ 03:29:08

Time Off Btm: 2009.11.30 @ 06:18:07

TEST COMMENT: IFF-strg bl thru-out slid tool approx 14'to bottom
 FFP-strg bl in 3 min
 Times 15-60-30-60
 ISIP-no bl bk, FSIP-1/4"bl bk



PRESSURE SUMMARY

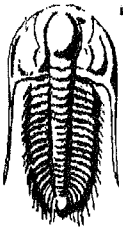
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1692.40	100.94	Initial Hydro-static
3	284.69	100.70	Open To Flow (1)
17	511.80	108.51	Shut-In(1)
77	947.82	108.86	End Shut-In(1)
78	525.72	108.73	Open To Flow (2)
107	805.06	112.06	Shut-In(2)
167	925.74	111.23	End Shut-In(2)
169	1628.11	108.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
340.00	MGO 20&G40%O20%W20%M	4.77
310.00	O&GCMW 20%G25%O35%W20%M	4.35
372.00	O&GCW 25%G25%O50%W	5.22
248.00	O&GCW 15%G10%O75%W	3.48
0.00	150'GIP	0.00

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Werth Exploration Trust

Worcester M-1

1308 Schwaller Ave
Hays KS 67601-2242

21 7s 22w Graham KS

ATTN: Andy Werth

Job Ticket: 36732

DST#: 1

Test Start: 2009.11.30 @ 01:01:43

Tool Information

Drill Pipe:	Length: 3443.00 ft	Diameter: 3.80 inches	Volume: 48.30 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 48.30 bbl</u>	Tool Chased 14.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3455.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.02 ft			
Tool Length:	66.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3435.00	
Shut In Tool	5.00			3440.00	
Hydraulic tool	5.00			3445.00	
Packer	5.00			3450.00	21.00 Bottom Of Top Packer
Packer	5.00			3455.00	
Stubb	1.00			3456.00	
Perforations	8.00			3464.00	
Recorder	0.01	8365	Inside	3464.01	
Recorder	0.01	6625	Outside	3464.02	
Blank Spacing	33.00			3497.02	
Bullnose	3.00			3500.02	45.02 Bottom Packers & Anchor

Total Tool Length: 66.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Werth Exploration Trust

Worcester M-1

1308 Schwaller Ave
Hays KS 67601-2242

21 7s 22w Graham KS

ATTN: Andy Werth

Job Ticket: 36732

DST#: 1

Test Start: 2009.11.30 @ 01:01:43

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	30000 ppm
Viscosity: 71.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.33 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
340.00	MGO 20&G40%O20%W20%M	4.769
310.00	O&GCMW 20%G25%O35%W20%M	4.348
372.00	O&GCW 25%G25%O50%W	5.218
248.00	O&GCW 15%G10%O75%W	3.479
0.00	150'GIP	0.000

Total Length: ^{496 water} ~~1270.00~~ ft Total Volume: 17.814 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .21@64F

Serial #: 8365

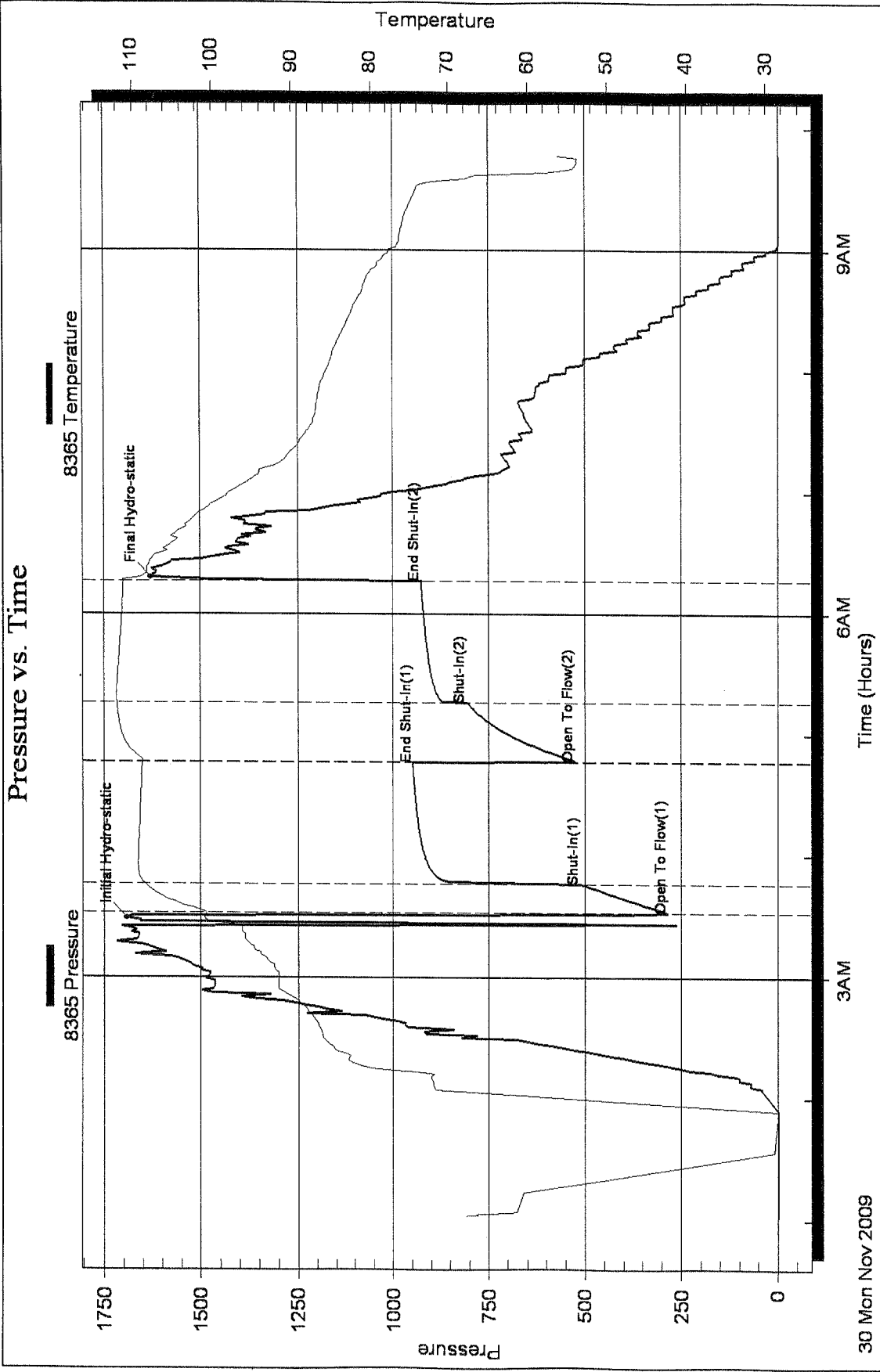
Inside

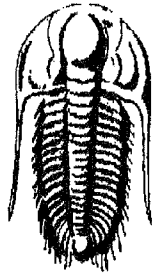
Werth Exploration Trust

21 7s 22w Graham KS

DST Test Number: 1

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Werth Exploration Trust**

1308 Schwaller Ave
Hays KS 67601-2242

ATTN: Andy Werth

21 7s 22w Graham KS

Worcester M-1

Start Date: 2009.12.01 @ 01:58:04

End Date: 2009.12.01 @ 07:22:58

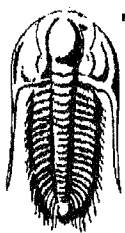
Job Ticket #: 36733 DST #: 2

RECEIVED

JAN 27 2010

KCC WICHITA

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Werth Exploration Trust

Worcester M-1

1308 Schwaller Ave
Hays KS 67601-2242

21 7s 22w Graham KS

ATTN: Andy Werth

Job Ticket: 36733

DST#: 2

Test Start: 2009.12.01 @ 01:58:04

Tool Information

Drill Pipe:	Length: 3570.00 ft	Diameter: 3.80 inches	Volume: 50.08 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 45000.00 lb
			Total Volume: 50.08 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3564.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.02 ft			
Tool Length:	91.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3544.00	
Shut In Tool	5.00			3549.00	
Hydraulic tool	5.00			3554.00	
Packer	5.00			3559.00	21.00 Bottom Of Top Packer
Packer	5.00			3564.00	
Stubb	1.00			3565.00	
Perforations	4.00			3569.00	
Recorder	0.01	8365	Inside	3569.01	
Recorder	0.01	6625	Outside	3569.02	
Blank Spacing	62.00			3631.02	
Bullnose	3.00			3634.02	70.02 Bottom Packers & Anchor

Total Tool Length: 91.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Werth Exploration Trust

Worcester M-1

1308 Schwaller Ave
Hays KS 67601-2242

21 7s 22w Graham KS

ATTN: Andy Werth

Job Ticket: 36733

DST#: 2

Test Start: 2009.12.01 @ 01:58:04

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 64.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.32 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
10.00	OCM 6% O94%M	0.140

Total Length: 10.00 ft Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

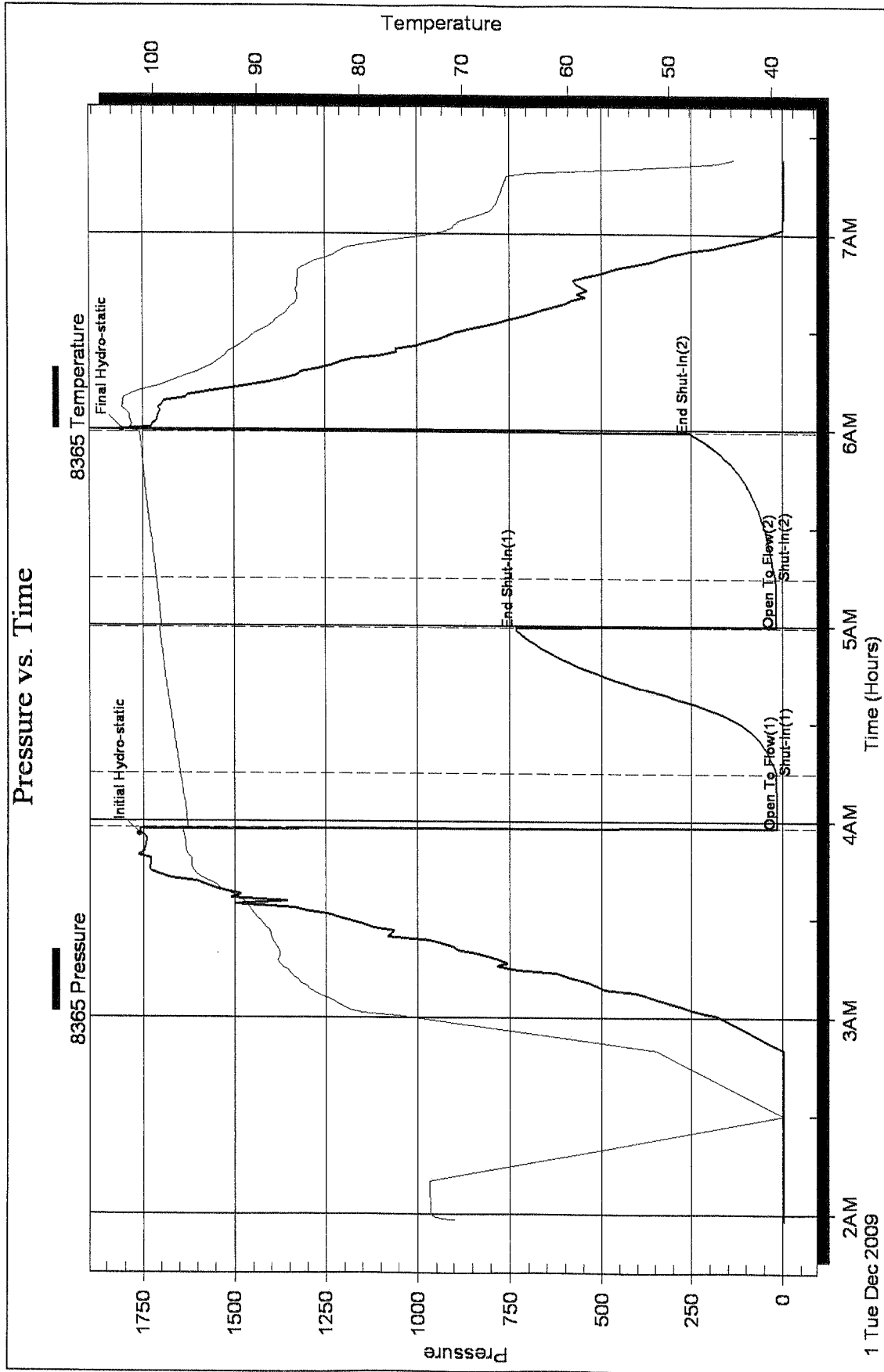
Serial #:

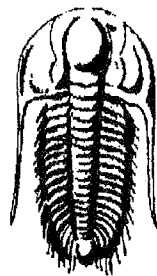
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Werth Exploration Trust**

1308 Schwaller Ave
Hays KS 67601-2242

ATTN: Andy Werth

21 7s 22w Graham KS

Worcester M-1

Start Date: 2009.12.01 @ 08:10:16

End Date: 2009.12.01 @ 14:33:10

Job Ticket #: 36734 DST #: 3

RECEIVED

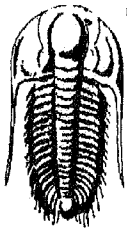
JAN 27 2010

KCC WICHITA

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Werth Exploration Trust

1308 Schwaller Ave
Hays KS 67601-2242

ATTN: Andy Werth

Worcester M-1

21 7s 22w Graham KS

Job Ticket: 36734

DST#: 3

Test Start: 2009.12.01 @ 08:10:16

GENERAL INFORMATION:

Formation: **LKC E-I**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:24:11
 Time Test Ended: 14:33:10

Test Type: Conventional Bottom Hole
 Tester: Ray Schwager
 Unit No: 42

Interval: **3536.00 ft (KB) To 3634.00 ft (KB) (TVD)**
 Total Depth: 3634.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2245.00 ft (KB)
 2240.00 ft (CF)
 KB to GR/CF: 5.00 ft

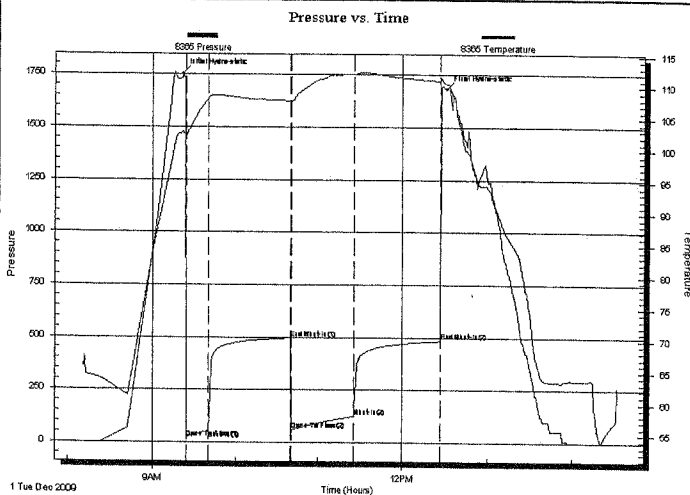
Serial #: 8365

Inside

Press@RunDepth: 124.97 psig @ 3569.01 ft (KB)
 Start Date: 2009.12.01 End Date: 2009.12.01
 Start Time: 08:10:16 End Time: 14:33:10

Capacity: 8000.00 psig
 Last Calib.: 2009.12.01
 Time On Btm: 2009.12.01 @ 09:22:11
 Time Off Btm: 2009.12.01 @ 12:31:10

TEST COMMENT: IFP-w k to a gd bl 1/2" to 6 1/2" bl
 FFP-w k to a gd bl 1/2" to 7 1/2" bl
 Times 15-60-45-60
 ISIP-no bl bk, FSIP-no bl bk



PRESSURE SUMMARY

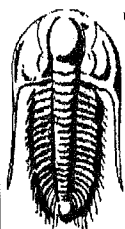
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1755.35	102.99	Initial Hydro-static
2	20.24	102.10	Open To Flow (1)
19	55.75	108.14	Shut-In(1)
78	493.67	107.79	End Shut-In(1)
79	60.22	107.68	Open To Flow (2)
123	124.97	112.05	Shut-In(2)
185	482.72	111.00	End Shut-In(2)
189	1680.82	110.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	125'GIP	0.00
25.00	CO	0.35
60.00	OCM 4%O96%M	0.84
30.00	SOCM 1%O39%W60%W	0.42
124.00	Water	1.74

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Werth Exploration Trust

Worcester M-1

1308 Schwaller Ave
Hays KS 67601-2242

21 7s 22w Graham KS

Job Ticket: 36734

DST#: 3

ATTN: Andy Werth

Test Start: 2009.12.01 @ 08:10:16

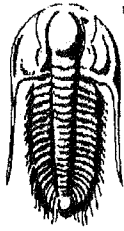
Tool Information

Drill Pipe:	Length: 3535.00 ft	Diameter: 3.80 inches	Volume: 49.59 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 49.59 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3536.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	99.02 ft			
Tool Length:	120.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3516.00	
Shut In Tool	5.00			3521.00	
Hydraulic tool	5.00			3526.00	
Packer	5.00			3531.00	21.00 Bottom Of Top Packer
Packer	5.00			3536.00	
Stubb	1.00			3537.00	
Perforations	32.00			3569.00	
Recorder	0.01	8365	Inside	3569.01	
Recorder	0.01	6625	Outside	3569.02	
Blank Spacing	63.00			3632.02	
Bullnose	3.00			3635.02	99.02 Bottom Packers & Anchor

Total Tool Length: 120.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Werth Exploration Trust

Worcester M-1

1308 Schwaller Ave
Hays KS 67601-2242

21 7s 22w Graham KS

Job Ticket: 36734

DST#: 3

ATTN: Andy Werth

Test Start: 2009.12.01 @ 08:10:16

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	49000 ppm
Viscosity: 64.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.33 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 500.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	125'GIP	0.000
25.00	CO	0.351
60.00	OCM 4%O96%M	0.842
30.00	SOCM 1%O39%W60%W	0.421
124.00	Water	1.739

Total Length: 239.00 ft Total Volume: 3.353 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW.16 @ 65F

Serial #: 8365

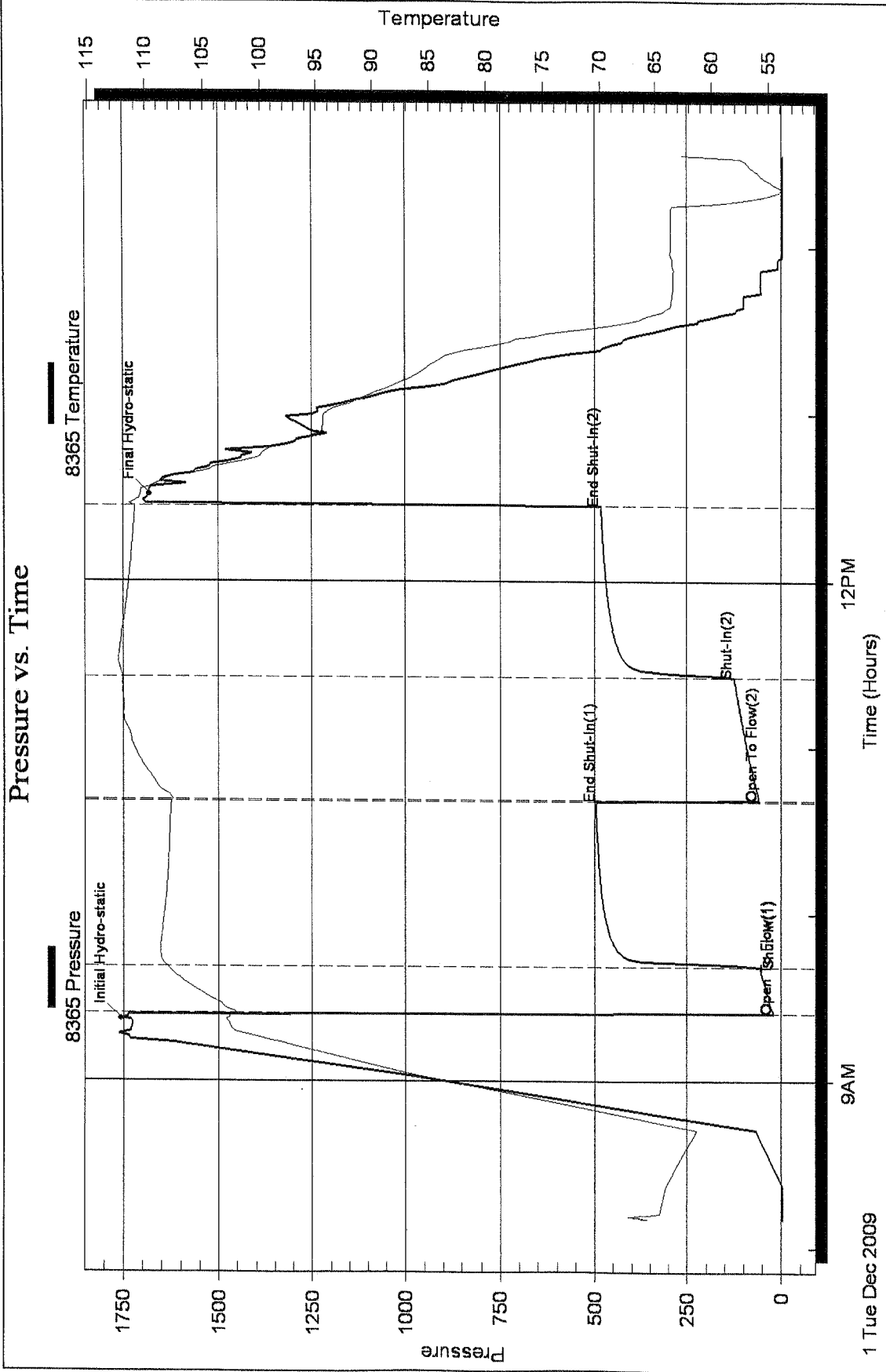
Inside

Werth Exploration Trust

21 7s 22w Graham KS

DST Test Number: 3

Pressure vs. Time

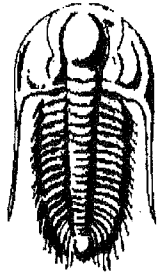


1 Tue Dec 2009

9AM

12PM

Time (Hours)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Werth Exploration Trust**

1308 Schwaller Ave
Hays KS 67601-2242

ATTN: Andy Werth

21 7s 22w Graham KS

Worcester M-1

Start Date: 2009.12.02 @ 07:54:15

End Date: 2009.12.02 @ 14:59:09

Job Ticket #: 36735 DST #: 4

RECEIVED

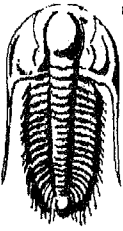
JAN 27 2010

KCC WICHITA

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Werth Exploration Trust

1308 Schwaller Ave
Hays KS 67601-2242

ATTN: Andy Werth

Worcester M-1

21 7s 22w Graham KS

Job Ticket: 36735

DST#: 4

Test Start: 2009.12.02 @ 07:54:15

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:40:10
 Time Test Ended: 14:59:09

Test Type: Conventional Bottom Hole
 Tester: Ray Schwager
 Unit No: 42

Interval: **3778.00 ft (KB) To 3790.00 ft (KB) (TVD)**
 Total Depth: 3790.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2245.00 ft (KB)
 2240.00 ft (CF)
 KB to GR/CF: 5.00 ft

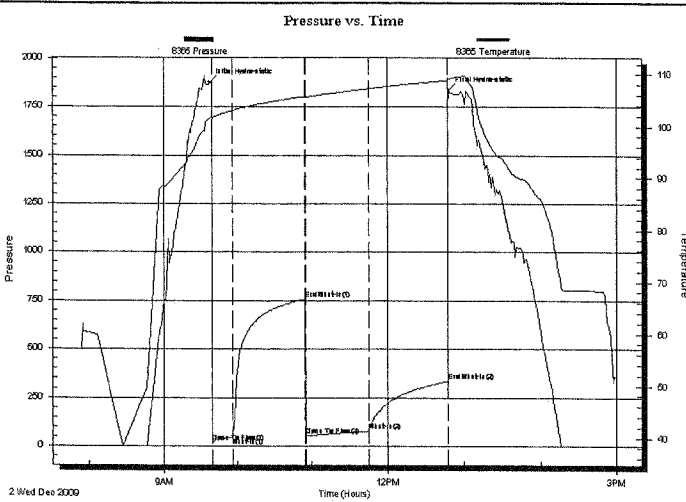
Serial #: 8365

Inside

Press@RunDepth: 77.64 psig @ 3784.01 ft (KB)
 Start Date: 2009.12.02 End Date: 2009.12.02
 Start Time: 07:54:15 End Time: 14:59:09

Capacity: 8000.00 psig
 Last Calib.: 2009.12.02
 Time On Btm: 2009.12.02 @ 09:38:10
 Time Off Btm: 2009.12.02 @ 12:48:09

TEST COMMENT: IFP-wk to a gd bl 1/2" to 7" bl
 FFP-wk to a fr bl 1/2" to 4 1/2" bl
 Times 15-60-45-60
 ISIP-surface bl bk, FSIP-surface bl bk



PRESSURE SUMMARY

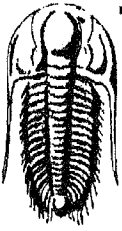
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1876.76	101.52	Initial Hydro-static
2	20.15	101.48	Open To Flow (1)
18	45.99	102.96	Shut-In(1)
77	757.48	105.76	End Shut-In(1)
78	56.84	105.58	Open To Flow(2)
128	77.64	107.25	Shut-In(2)
189	335.41	108.85	End Shut-In(2)
190	1836.57	109.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	625'GIP	0.00
240.00	CO	3.37

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Werth Exploration Trust

Worcester M-1

1308 Schwaller Ave
Hays KS 67601-2242

21 7s 22w Graham KS

Job Ticket: 36735

DST#: 4

ATTN: Andy Werth

Test Start: 2009.12.02 @ 07:54:15

Tool Information

Drill Pipe:	Length: 3787.00 ft	Diameter: 3.80 inches	Volume: 53.12 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 53.12 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3778.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	12.02 ft			
Tool Length:	33.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3758.00	
Shut In Tool	5.00			3763.00	
Hydraulic tool	5.00			3768.00	
Packer	5.00			3773.00	21.00 Bottom Of Top Packer
Packer	5.00			3778.00	
Stubb	1.00			3779.00	
Perforations	5.00			3784.00	
Recorder	0.01	8365	Inside	3784.01	
Recorder	0.01	6625	Outside	3784.02	
Perforations	3.00			3787.02	
Bullnose	3.00			3790.02	12.02 Bottom Packers & Anchor

Total Tool Length: 33.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Werth Exploration Trust

Worcester M-1

1308 Schwaller Ave
Hays KS 67601-2242

21 7s 22w Graham KS

Job Ticket: 36735

DST#: 4

ATTN: Andy Werth

Test Start: 2009.12.02 @ 07:54:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.33 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	625'GIP	0.000
240.00	CO	3.367

Total Length: 240.00 ft

Total Volume: 3.367 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

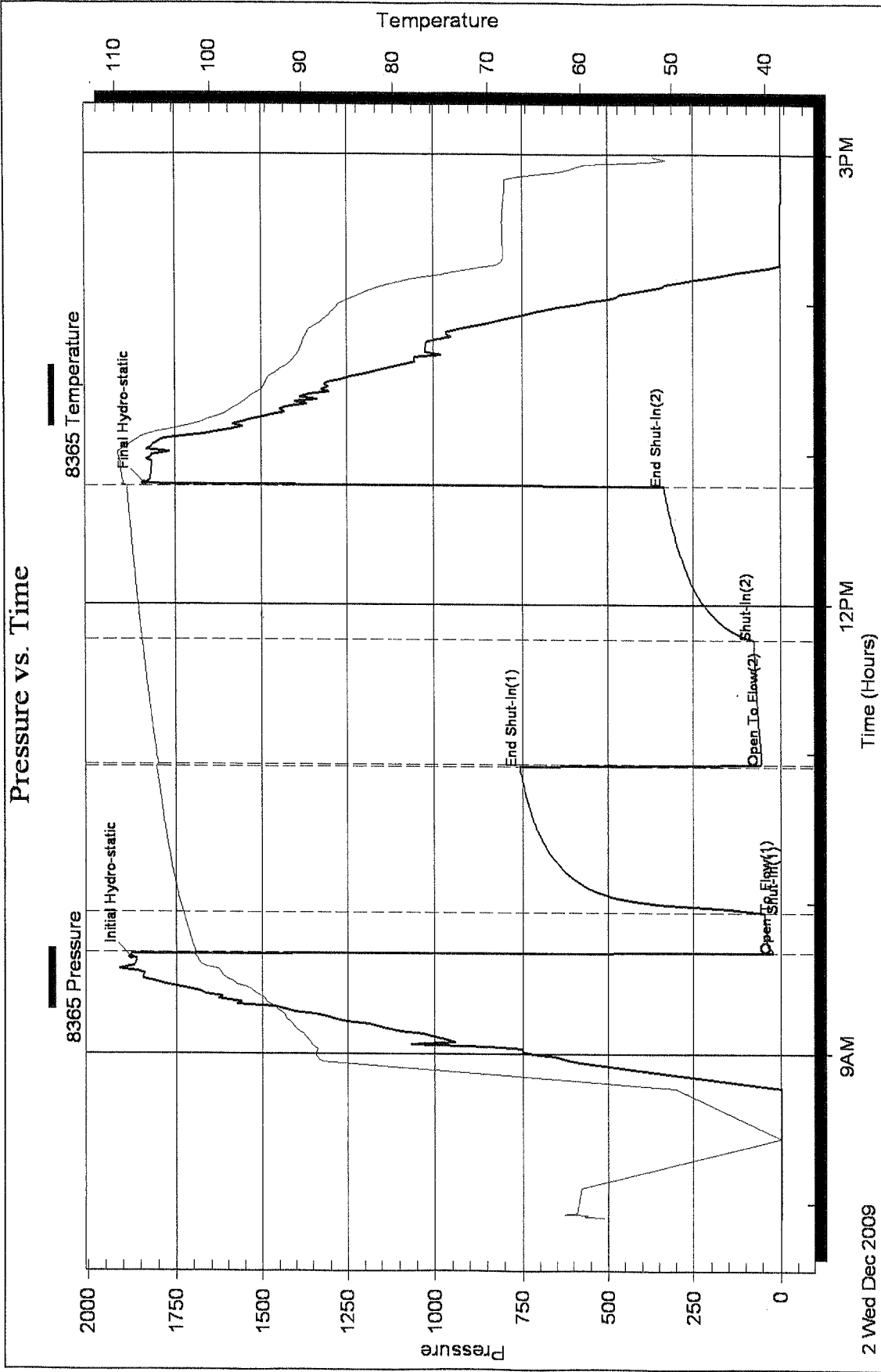
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



2 Wed Dec 2009